Quick Reference Guide for BioStar SE

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Required Components

Per Door

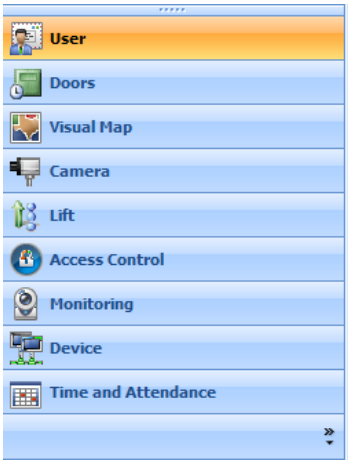
Per Solution

Per Job

Per Door

Getting Started

BioStar is an extremely user friendly and intuitive platform that will allow control of both access and time & attendance in a Suprema biometric system. Here are a few pieces of the software you will want to be familiar with.



Shortcut Dashboard
This is the main panel to help you navigate through BioStar. This is your access point to the main system interfaces.

Task Pane
In every category management interface you will find a task pane. This is your go-to link for all main actions in BioStar.

Category Tree
In every category management interface you will see a tree in the top left corner. This will show you a list of all active items pertaining to the selected category (users, devices, doors, etc).

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Support Information

Thank you for your purchase and welcome to ENTERTECH SYSTEMS, the exclusive agent of Suprema technology for the United States, Canada and Puerto Rico. We are purpose-built to make biometric technologies available for mainstream adoption. Our systems approach Access Control and Time & Attendance removes the three main obstacles to mass market adoption of biometric systems: **Cost**, **Complexity**, and **On Boarding Users**.

We are based in North America and dedicated to helping you successfully use your newly purchased Suprema products and solutions.

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Software Installation

BioStar is simple to install and comes in three pieces (Server Installer, Client Application and Express Installer). This allows for basic installation and different options for setup.

Server Installer: Installs the **BioStar server application** as well as **MS SQL Server Express(optional).** The Server Application Installer is ideal where a system is deployed with a dedicated server and many Client Applications running on one or more workstations.

Client Application: Installs the **BioStar client application** along with **Microsoft Visual C++ 2005 Redistributable**. The client application can be installed multiple times throughout the system, and will be installed on each workstation required to manage the BioStar system.

Express Installer: Installs both the server setup and client application. The Express Installer is ideal for systems where the BioStar server application and client application will be managed from one workstation.

System Requirements

The software requirements to run the BioStar software are:

- CPU - Intel Pentium Dual Core or similar processor, capable of processing
- Speeds of 2GHz or faster
- RAM - 1GB for Windows XP; 2GB for other operating systems
- HDD - 10GB

Installing BioStar Server Application

- Insert the BioStar installation CD.
- Locate the installation directory and run BioStar 1.5 Server Setup.
- Follow the on-screen prompts to begin the installation.
- You will be required to accept the OpenSSL license agreement. You have the option to install the MS SQL server express edition. If you wish to use an existing version of MS SQL, MySQL or Oracle you can choose to.
- When the Create Database [BioStar] window appears, select a database type (MS SQL Server, MySQL or Oracle). The database server address and port numbers will be automatically populated.
- With a MS SQL server Windows authentication will be used as default. You can choose to use Server authentication if needed.
- Click **Setup** to create the database.
- Upon completion click **Finish**.
- Once program completes remaining tasks click **Finish**.

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Installing BioStar Client Application

- Insert the BioStar installation CD.
- Run BioStar 1.5 Client Setup to launch the installation wizard.
- Follow the on-screen prompts to complete the installation.

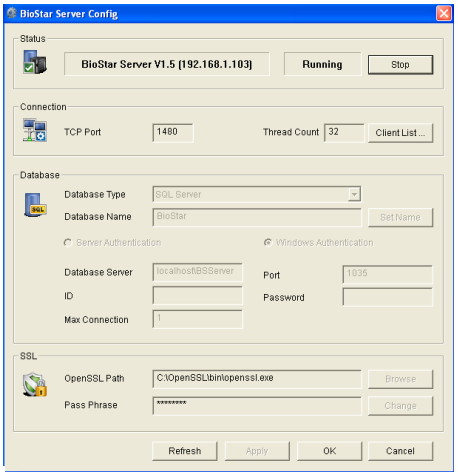
Initial Log On To BioStar

Before you are able to log on to BioStar you must first start the BioStar server and apply the correct server settings.

Starting the BioStar Server

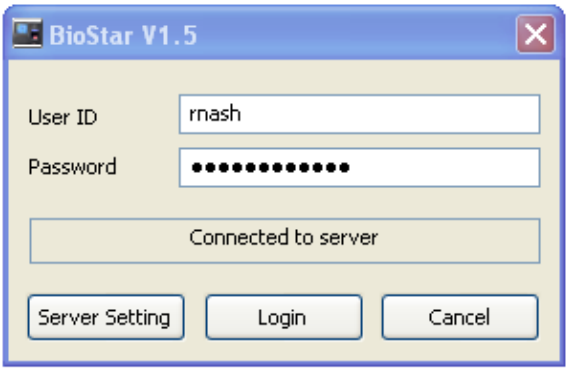
By default the BioStar server is stopped. To start the BioStar server:

- Open the **BioStar Server Config** from the icon on your desktop
- You will receive a message reading "Cannot connect to BioStar Server. Please start it first." Click OK.
- Click **Start** (top right corner).
- Status will now show the **BioStar Server IP address.**
- Click OK.



Adding an Admin ID/Password

- Open **BioStar 1.5** from the icon on your desktop.
- Click on server setting.
- Enter the **BioStar Server IP** (generally listed in BioStar Config window).
- Click test to verify connection.
- Click **Save.**



BioStar will now prompt you to enter an Admin ID/Pass. Once you have entered the appropriate credentials you will be able to login in using the newly created admin ID/Password.

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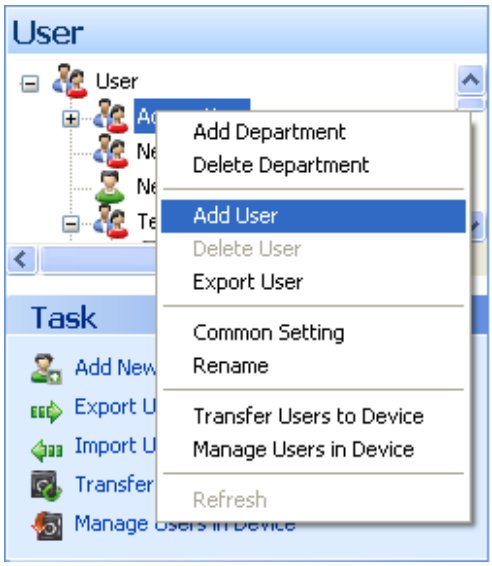
User Management

Adding a New User

In order to add a new user you will need to click the **Add New User** button in the task pane or right click on the department you wish to add the user to and click **Add User.**



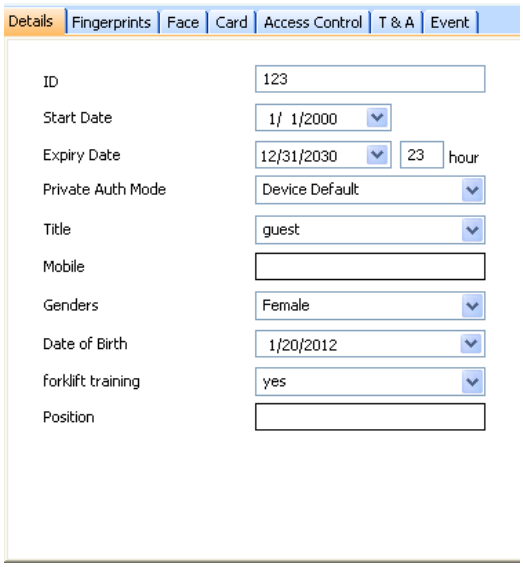
Step # 1 – Details Tab

You will be brought to a blank user profile. Here you can enter basic information relevant to your system (eg, name, department, ID).

From the details tab you can also:

- Set start/expiry dates.
- Define private authorization modes (eg finger only, finger+pin, etc).

All fields can be customized through the option menu at the top of the screen. Go to: **Option->User-> Custom Field Settings.**



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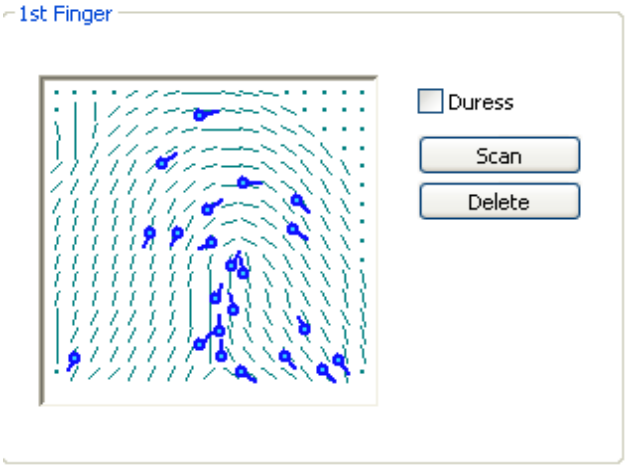
Step # 2 – Fingerprint Tab

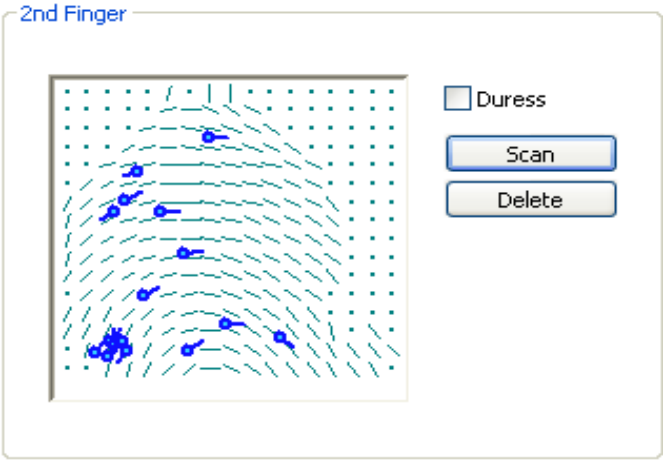
BioStar provides the power of handling up to 10 templates per user. All enrollments **MUST** be completed using a 2X3 enrolment strategy. This means two fingers, with three templates per user. From the finger print tab:

- Ensure the **enroll device** is the correct device you want to use.
- Press the add button to add a finger, add six fingers.
- Highlight the first finger.
- Press scan, user places finger, removes, places again.
- Enroll three templates of right index and three templates of left index fingers.
- Click **Apply.**

Good Enrollment



Poor Enrollment



Important Notes

- When completing an enrollment you want to make sure the core (middle) of the finger is visible. This is where the majority of data is stored and will ensure a higher rate of success.
- Employees that have a hard time on the system can be enrolled using a 2X5 method. (Two fingers, five templates each.)
- Success rates can be dependent on the user's method of use. Ensure users place finger flat on sensor. There is a ridge at the bottom of the sensor for the line of the user's first knuckle.

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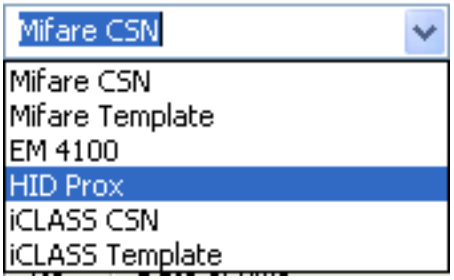
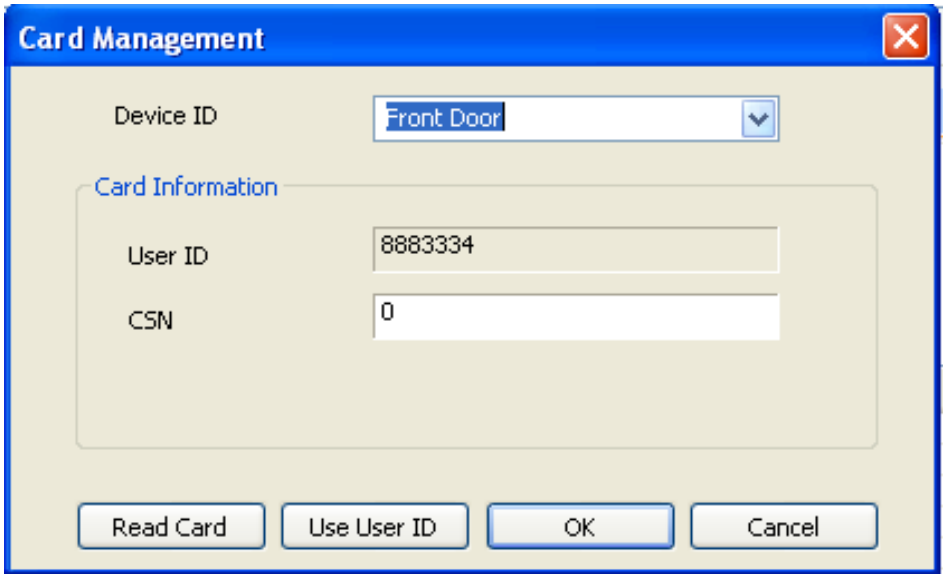
Step # 3 – Card Tab

From the card tab, BioStar will allow users to have a card enrolled to be used for sole access or in combination with a biometric/pin. BioStar is capable of managing a wide variety of card types, including Mifare, HID and iCLASS. You also have the ability to enroll templates directly to a Mifare or iCLASS card. To enroll a card:

- Select the card type you wish to enroll (this will be device dependent).
- Press the **Card Management** button.
- Select the device you wish to enroll the card from by choosing it in the device ID drop down box.
- Press the **Read Card** button.
- Place card on the device at the card sensor (generally under the finger sensor).
- Press **OK**.
- Press **Apply.**





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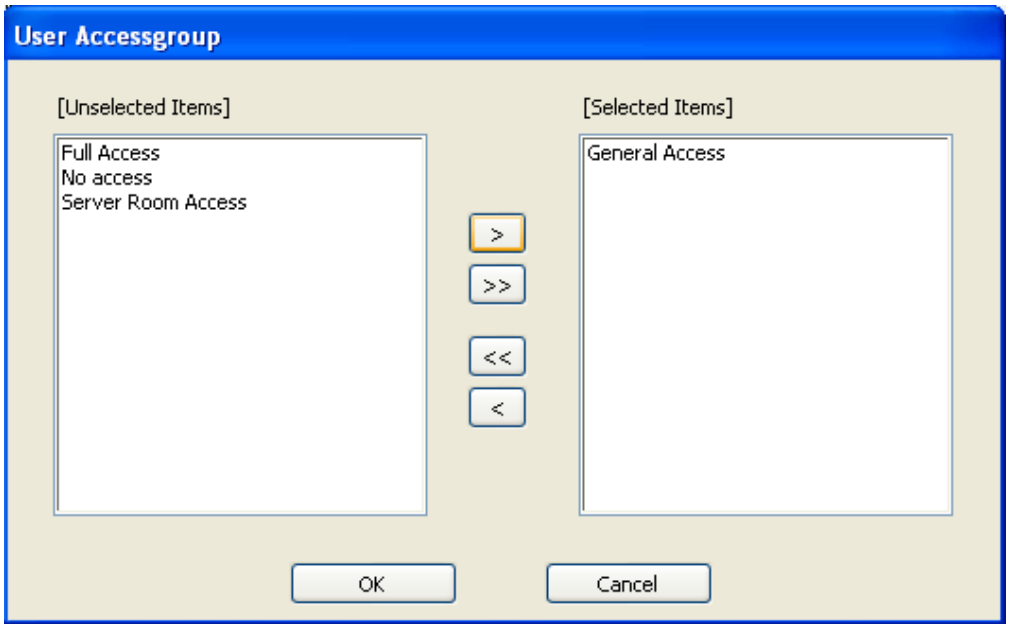
Step #4 – Access Control Tab

From the access control tab you are able to apply an access group to the user. This will control which doors the user has access to and when. Please see **page 17** to learn how to build an access group. All users will be given **Full Access** by default. To add an access group to a user:

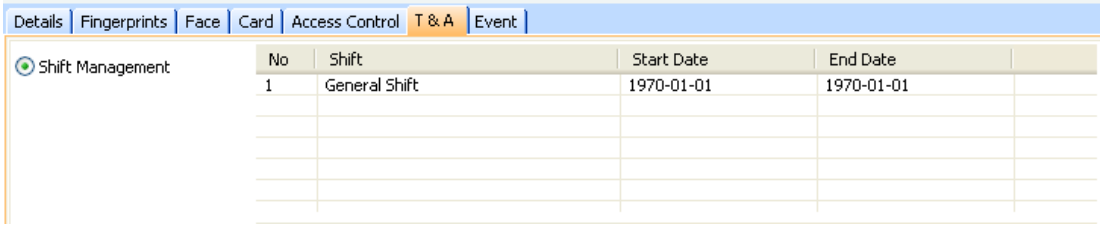
- Click the **Add** button.
- Move Full Access to the left hand side (unselected items) using the arrows.
- Move the desired access group to the right hand side (selected items) using the arrows.
- Click **OK**.
- Click **Apply**.



Step #5 – T&A Tab

If you are using BioStar to manage a time & attendance system you will want to apply a shift to an employee from the T&A tab. Please see **page 19** to learn how to build a shift. To add a shift to the user:

- Select shift management (default).
- Click **Add** (bottom of screen).
- Add the desired shift for that user.
- Click **Apply**.



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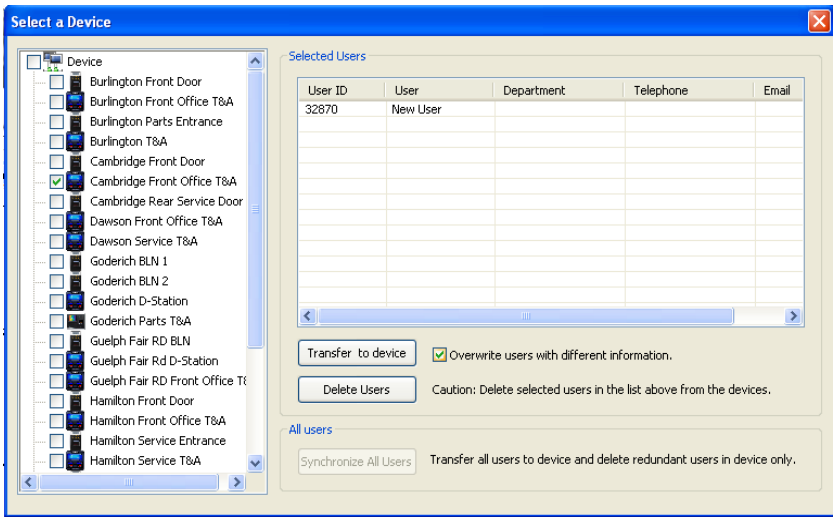
Step #6 – Transferring Users to Device

- Highlight user/department in user tree (upper left).
- Right click on user.
- Select Transfer user to device.
- Select the device(s) from the device tree (click the checkbox).
- Press **Transfer to Device**

** If you are updating existing users, click the "overwrite users with different information" to ensure up-to-date data on device.

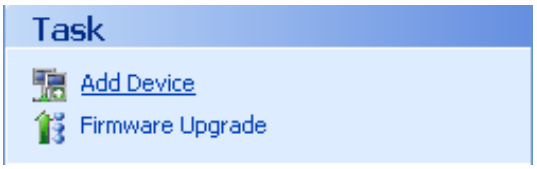


Device Management

Adding a Device – Server Mode (Recommended)

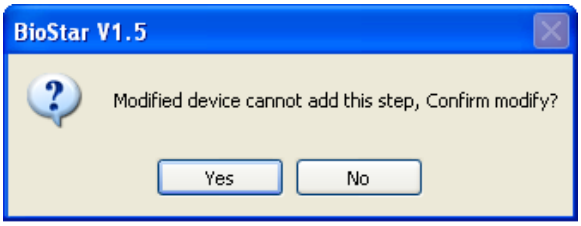
BioStar has the ability to add a device in two separate ways, direct or server. For best practice and better logging ability it is recommended to add devices using server mode. In server mode, devices will automatically populate in the device tree and upon an event automatically communicate back to the server to provide constant communication even when the software is not running. To add a device in server mode:

- Click the **Device** shortcut to access the device management home screen.
- Click the Add Device button in the task pane.
- Select LAN and press Next.
- Specify your desired search type (UDP/TCP).



UDP – BioStar will search under the current IP address of the BioStar server
TCP – Allows you to define the IP range to search under. Ideal if you are using alternative static IP addresses

- Highlight the device you wish to add in server mode. This will allow you to modify the device's network settings.
- Click the server checkbox and enter the server IP. Server IP address can be modified if needed. Click Modify.
- You will get a message reading "**Modified device cannot add this step, confirm modify.**" Click Yes.
- Click Next, Click Finish.



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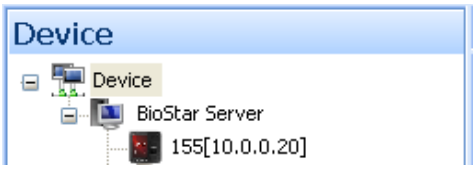
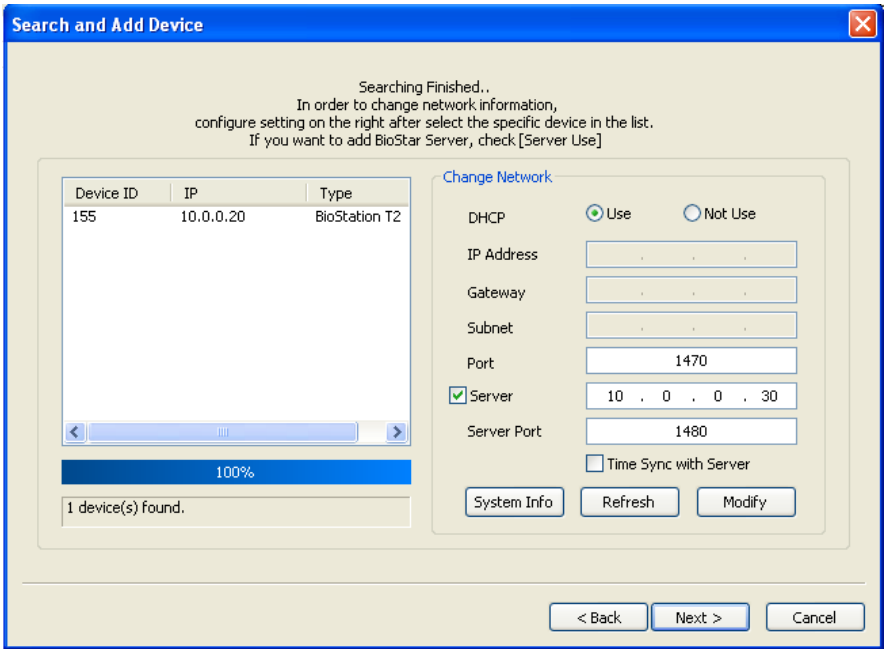
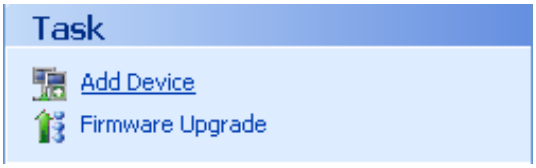
The device will not appear immediately, it can take up to five minutes for the device to make its initial communication with the server. Press the **refresh** button at the top of the screen to allow the device to appear under the device tree. Note now the device will be listed under the **BioStar Server.**





Adding a Device – Direct Mode

- Click the **Device** shortcut to access the device management interface.
- Click the **Add Device** button in the task pane.
- Select LAN and press **Next**.
- Specify your desired search type (UDP/TCP).
- Click **Next**.
- Once the search is complete click **finish**.
- Click the checkboxes next to the devices you wish to add, click **Add**.
- Click **Finish**.



The device(s) are now online, and will appear under the device tree.

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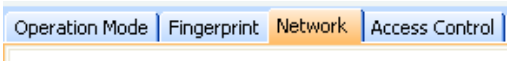
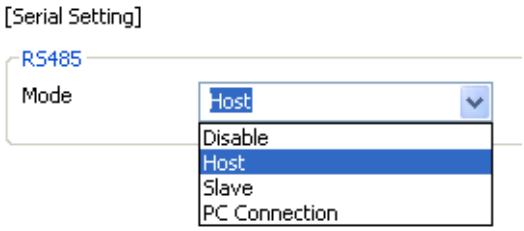
Preparing a Device to Use a Secure IO

In a Suprema system every device should be installed with a Secure I/O door controller. In order to allow a device to communicate with the Secure I/O you must make sure it is set as a RS-485 **host** device. To modify the RS-485 settings:



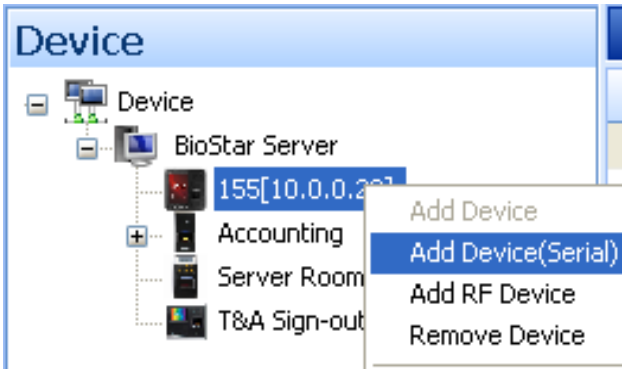
- Click on the device from the device tree.
- Choose the **Network** tab.
- Ensure the RS485 mode is set to **Host.** This is listed under **Serial Setting**.
- Click **Apply**.



Adding a Secure I/O

To add a Secure I/O to a previously registered device:

- Right click on a device in the device tree.
- Select **Add Device (Serial)**.
- Once the search is complete click **finish**.
- Click the checkbox next to the Secure I/O, click **Add**.
- Click **Finish**.



The Secure I/O will be listed underneath the desired device, you will be able to view it by expanding the plus sign next to the device.

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Door Management

Adding A New Door

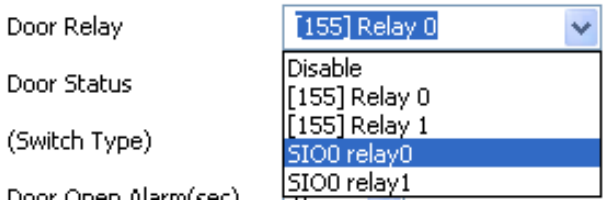
BioStar has the ability to efficiently manage up to 512 doors (BioStar SE). Each door can be controlled by a specific device and protected by a Secure I/O. To add a new door:

- Click the **Doors** shortcut to door management interface.
- Click **Add New Door** in the task pane.
- Supply a name for the new door.
- Click **Apply**.

In order to control a door, you must associate a device with the new door. To add a device to the door:

- Right click on the door in the door tree.
- Select add device.
- Select the device you wish to add to the door and press **OK**.
- Select the device from the **IO Device** drop down bar.
- To ensure use of the Secure I/O, select **SIO0 Relay 0** from the door relay drop down.
- Click **Apply**.

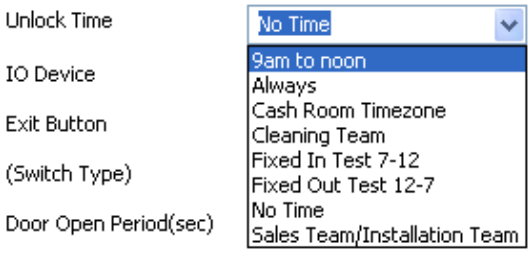
The door is now completely configured to provide superior security using the Secure IO.



Adding an Unlocking Schedule

Through the BioStar software you have the ability to set up an unlocking schedule to accommodate times a specific door should be unlocked. To set up an unlocking schedule:

- Select a door from the door tree.
- In the details tab use the **Unlock Time** drop down bar to select a time zone you have previously configured. (see **page 16** for instructions for configuring a time zone).
- Click **Apply**.



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Adding a Exit Device

Adding an exit device (RTE, PIR, etc) to a Suprema system is extremely simple. To add an exit device to a door:

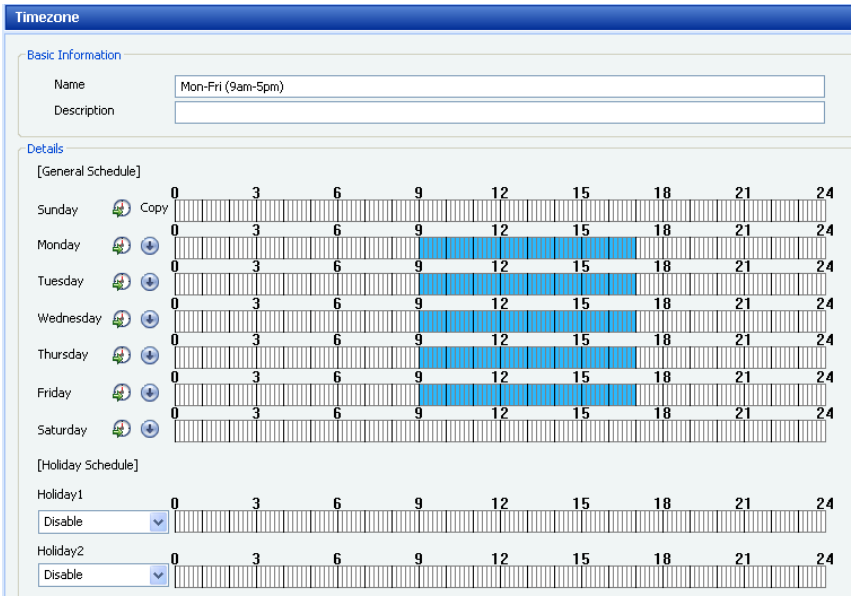
- Select the door from the door tree.
- From the details tab use the **Exit Button** drop down bar to select the correct input to trigger with the exit button.
- Click **Apply**.

Access Control Management

Adding a New Timezone

One very helpful tool in BioStar is **Timezones**. Timezones can be used to configure unlocking schedules for doors, access times for certain users as well as time parameters for specific device functions. To build a Timezone:

- Click the **Access Control** shortcut to view the access control management interface.
- Click the **New Timezone** button under the task pane.
- Use the mouse to drag the time parameter you wish to set in the Timezone. You can copy the information from the previous day by using the buttons.
- Once you have added the correct time parameters for each day, click **Apply**.



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Transferring Timezones to a Device

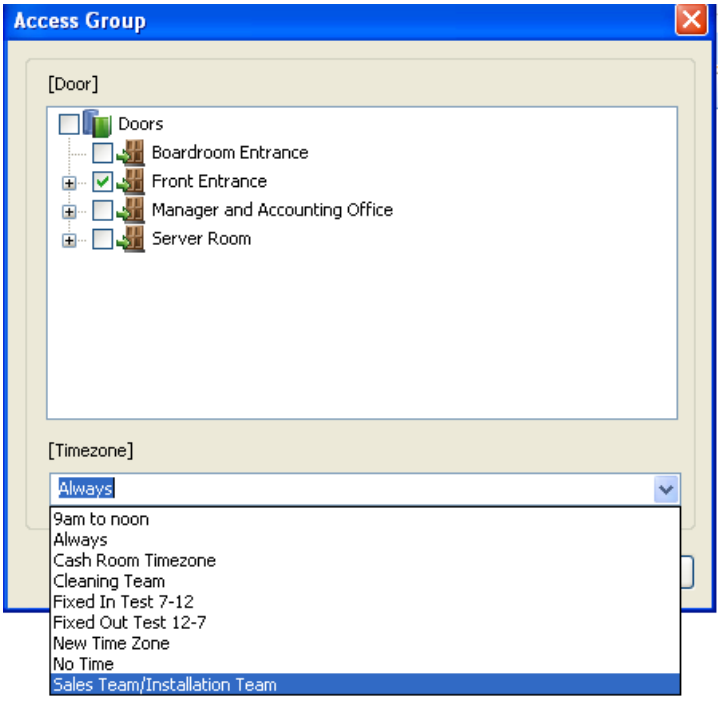
Once a Timezone has been correctly built it must be transferred to the device(s). This will ensure that the device(s) still function correctly in the case of a network outage. To transfer a Timezone:

- Highlight the desired Timezone in the Timezone tree.
- Select **Transfer to Device** in the task pane.
- Select all devices.
- Click **OK**.

Adding An New Access Group

In BioStar an access group will define which set of doors a particular group of users have access to and when. A user can belong to up to four different user groups to ensure any access scenario is accommodated. To build an access group:

- Click the **Access Control** shortcut to view the access control management interface.
- Click the **New Access Group** button under the task pane.
- Click add (bottom of the screen).
- Select which door(s) you wish users in this group to have access to.
- Choose a Timezone from the drop down bar. This will determine what time parameters users in this group will have access to the defined door(s).
- Click **OK**.
- Click **Apply**



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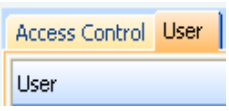
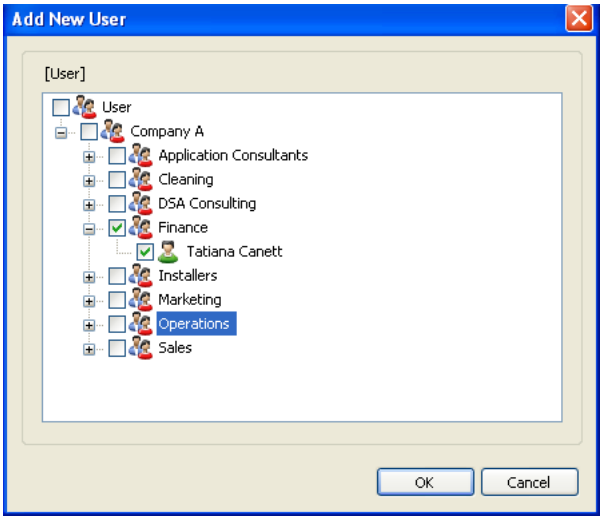
Adding Users to an Access Group

After adding a list of doors for your new access group, you will want to add users to the group. This is done from the **User** (in the access group window) tab. To add users to an access group:



- Click **Add** at the bottom of the screen.
- Choose all users, the department, or an individual user you wish to add to the group.
- Click **OK**.
- Click **Apply**.

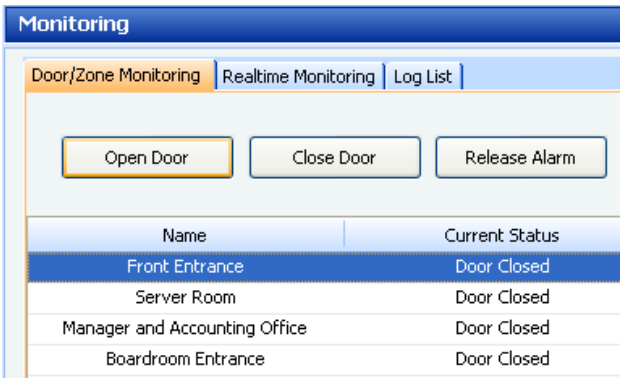


Monitoring Management

Opening/Closing a Door

Through the BioStar software you have the ability to remotely open/close a door. To open/close a door:

- Click the **Monitoring** shortcut to access the monitoring management interface.
- From the Door/Zone Monitoring tab you will see a list of all doors.
- Click the door you wish to open/close.
- Click **Open Door/Close Door**.



** Once a door has been remotely opened through the BioStar software it will remain open until forced closed through the software.

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Real-time Monitoring

In the BioStar Monitoring management interface you will have the ability to view events as the take place in your system. To view Real-time monitoring:

- Click the **Real-time Monitoring** tab.
- This shows you any events that have taken place since you started BioStar.
- As events take place they will populate at the bottom of the screen.

By default events taking place at **all** doors will be visible; to view events at a specific door simply highlight the desired door in the door tree on the left hand side.

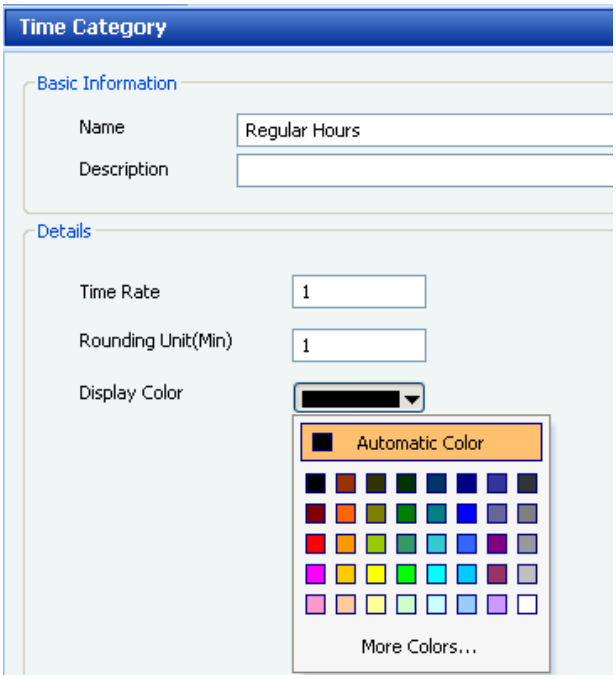
Time & Attendance Management

BioStar has the unique ability to combine a full featured access control system with powerful time & attendance capabilities. A time & attendance system in the BioStar software is made up of three unique pieces (Time Categories, Daily Schedules, Shifts). These pieces can be configured in multiple ways to accommodate the different needs of a time & attendance system. Below are instructions to build a basic time & attendance system.

Adding a New Time Category

Time Categories allow you to define different time rates and rounding abilities. This can be beneficial when setting up shifts that include overtime. To add a time category:

- Click the **Time and Attendance** shortcut to access the Time and Attendance management interface.
- Click the **Add Time Category** button in the task pane.
- Enter your Time Rate. Time rates can accommodate for time & half/double time scenarios (Default 1).
- Enter your Rounding Unit (Default 1).
- Choose a display color (Default Black).
- Click **Apply**.



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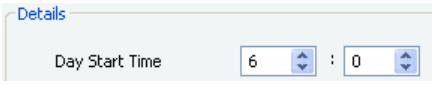
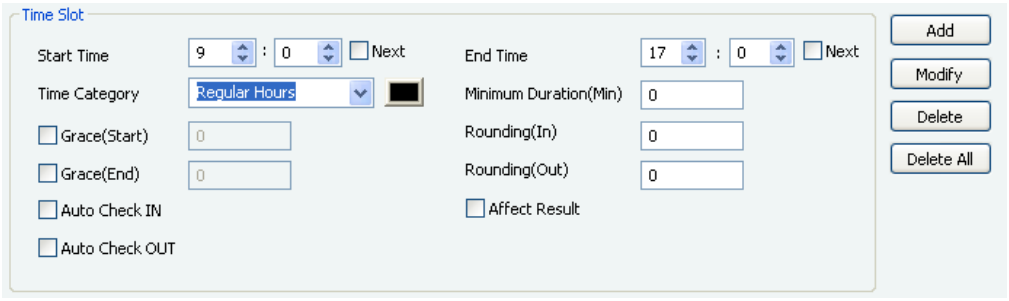
Adding a New Daily Schedule

Daily Schedules are used to define the time parameters BioStar will recognize and capture a user's time. Using a Daily Schedule you can apply a variety of features such as grace times, minimum work time durations, etc. After a Daily Schedule is complete you will use it to help build a shift. To add a Daily Schedule:



- Click the Add Daily Schedule under the task pane.
- Provide a name.
- Set a day start time (this is the earliest you can begin clocking time).
- Under the time slot section enter a **start/end** time (this is the time parameters we will capture with our Time Category).
- Choose a Time Category from the (Time Category) drop down bar.
- Click **Add**.
- Click **Apply**.



Adding a New Shift

The final piece of setting up basic time & attendance is a **Shift.** There are two different shift cycles available in BioStar SE, weekly and daily.

Weekly Cycle: Shift repeats on a weekly basis, able to apply a daily schedule to each day of the week.

Daily Cycle (BioStar SE): Shift is customizable by day. Daily schedule is able to be applied to each day of the month.

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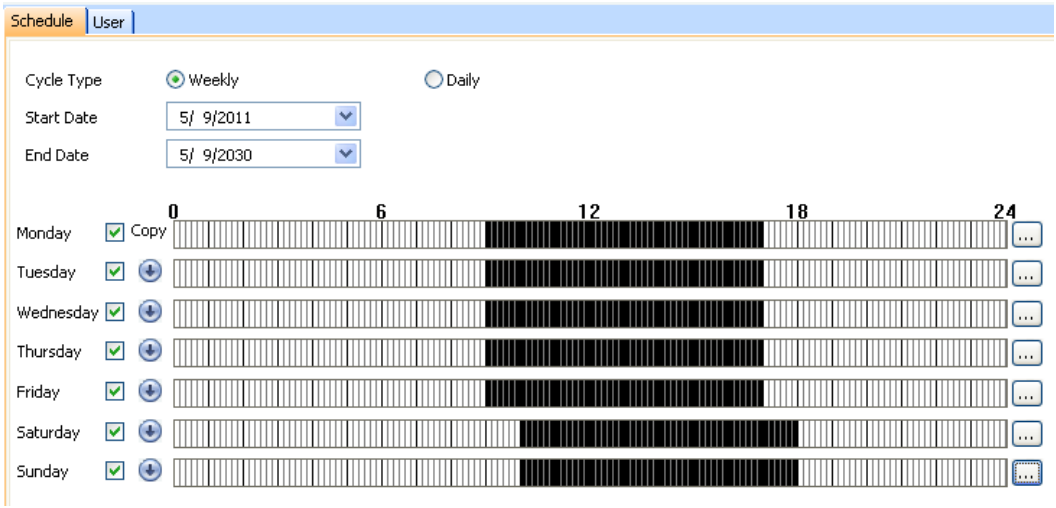
To Build a New Weekly Shift

- From the task pane, click the **Add Shift** button.
- Provide a name.
- Select cycle type (weekly/daily).
- Select end date (can extend year to 2030 max. Allows for shift to continually repeat).
- Click the checkbox for each work day.
- Add a **Daily Schedule** using the ellipsis button (…)
- Copy shifts to the next day using the button as needed.
- Press **Apply**.



Adding Users to a Shift

From the User tab in the new shift screen you have the ability to add users to the group. You can add all users, departments or individuals to a Shift. The shift will show up on each user profile, each user can belong to up to four shifts. To add a user to a shift:

- Click add (bottom of screen).
- Select all/department/user you wish to add to the shift.
- Click **OK**.
- Click **Apply**.

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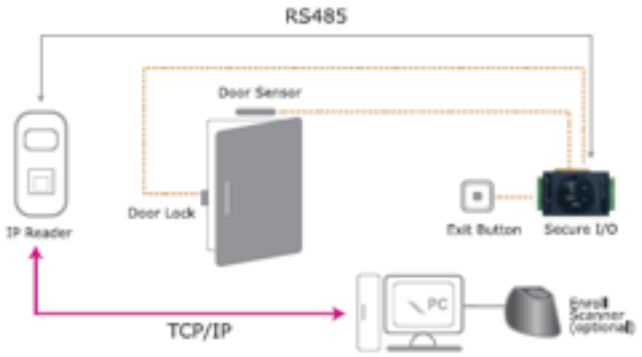
System Installation

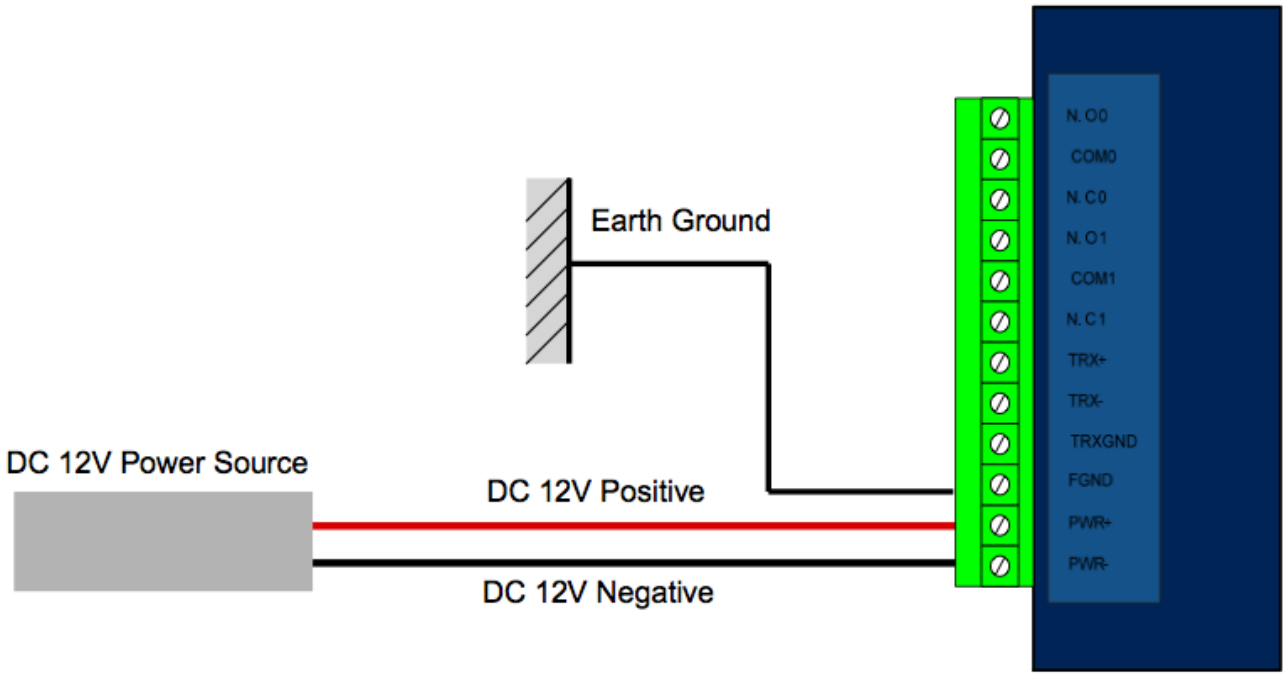
Suprema's IP access control systems provide simplistic installation methods that allow for quick setup and convenient maintenance methods.

Secure I/O Wiring

The secure I/O is designed to make installation of a Suprema biometric system straight forward while not compromising the functionality of traditional access control systems. Below are the basic wiring methods for a Secure I/O:



Power Connection



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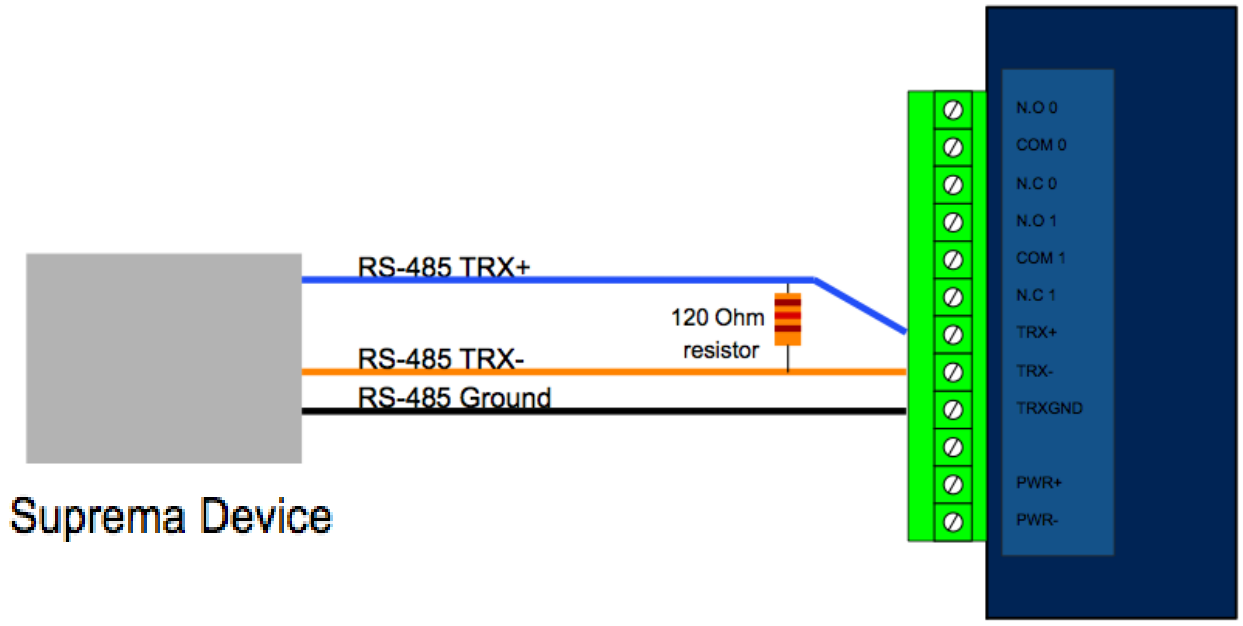
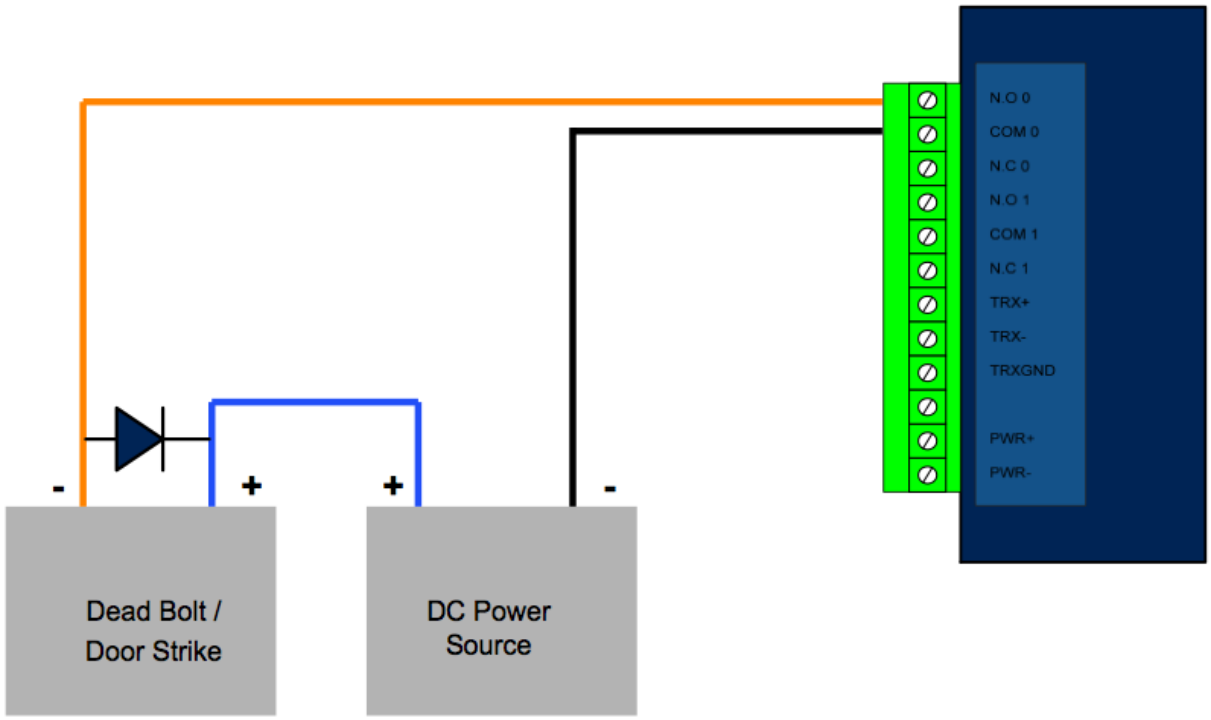
Device Connection



Wiring a Fail Secure Lock



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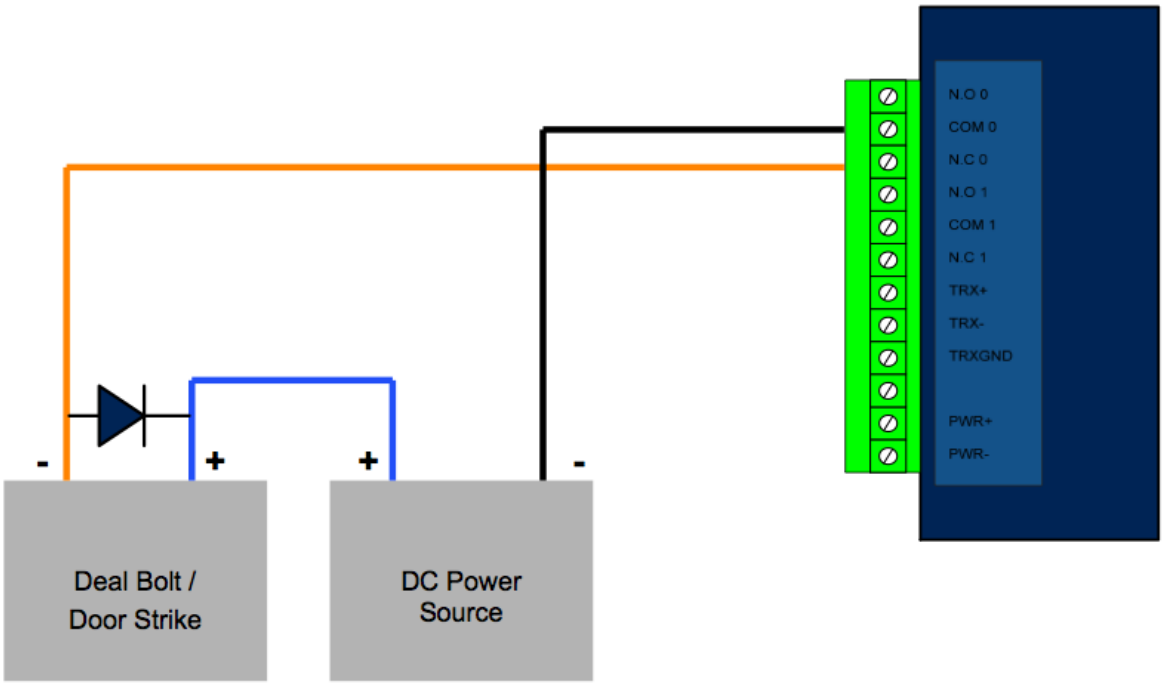
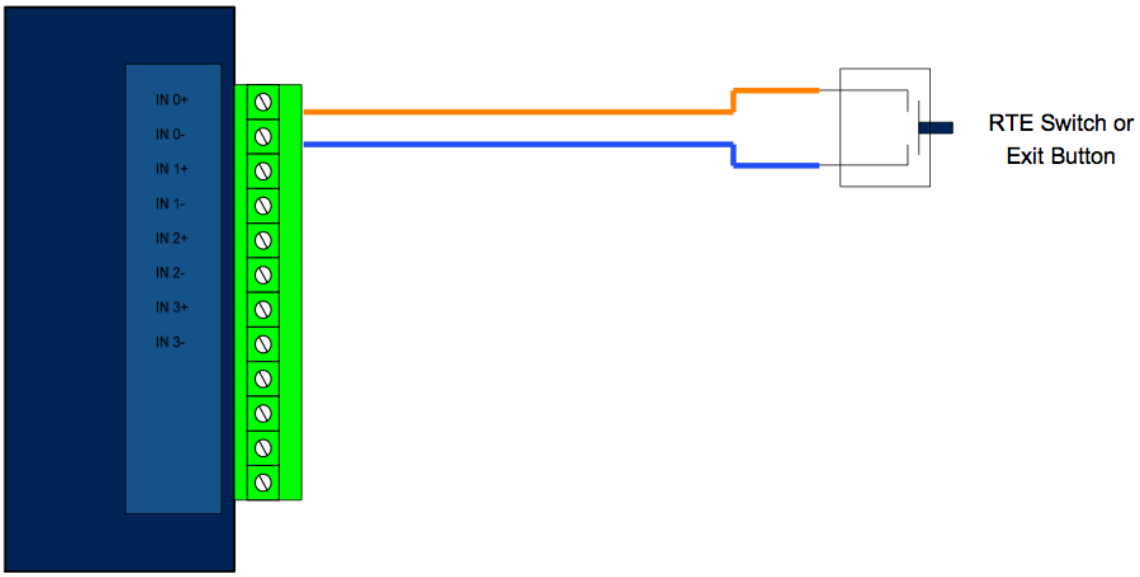
Wiring a Fail Safe Lock



Wiring a Exit Device (RTE,PIR,etc)



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RS-485 Wiring Harnesses

When wiring a Secure I/O you will consistently use the RS-485 wiring harness. This is included with the device. Below is a diagram of each device's RS-485 harness.

BioStation T2

PIN	PIN DESCRIPTION	WIRE
1	485 TRX+	BLUE
2	485 TRX-	YELLOW
3	GND	BLACK
4	SHIELD GND	GRAY

BioLite Net

15	Power 12V	Red
16	Power Ground	Black
17	RS485 Ground	White (Black String)
18	RS485 +	Blue (White String)
19	RS485 -	Yellow (Black String)

D-Station

PIN	PIN DESCRIPTION	WIRE
1	485 TRX+	BLUE
2	485 TRX-	YELLOW
3	GND	BLACK
4	SHIELD GND	GRAY

BioEntry Plus

PIN	PIN DESCRIPTION	WIRE
1	POWER +12V	RED
2	POWER GND	BLACK
3	RS -485 GND	GRAY
4	RS -485 TRX+	BLUE
5	RS -485 TRX-	YELLOW

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BioStation

PIN	PIN DESCRIPTION	WIRE
1	485 TRX+	BLUE
2	485 TRX-	YELLOW
3	GND	BLACK
4	SHIELD GND	GRAY

X-Pass

No	Pin Name	Full Name	Color
1	485 GND	485 GND	White (black string)
2	WGD GND	Wiegand-GND	Black
3	485 -	485 -	Yellow (black string)
4	WGD D1	Wiegand-1	White
5	485 +	485 +	Blue (white string)

X-Station

Pin	Pin Description	Length	Cable Type	Wire Color
1	GND	30cm	AWG26	BLACK
2	RS485 TRX-			YELLOW
3	RS485 TRX+			BLUE

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